JRL Of Research on the Lepidoptera

THE LEPIDOPTERA RESEARCH FOUNDATION, 13 SEPTEMBER 2012

Volume 45: 91-92

ISSN 0022-4324 (print) ISSN 2156-5457 (online)

BOOK REVIEW

LRF

Lepidoptera Argentina, Parte I: Castniidae by F. C. Penco, 2011

Distributed by the author. Morón (Argentina), 41 pp. ISBN 978-987-33-0384-5. Price: approx. US\$ 25.00

South America is the continent that harbors by far the highest species richness of all the Lepidoptera. Only a few recent book series aim at covering some larger fraction of country-wide faunas beyond the butterflies. One example is the series Mariposas del Ecuador, edited by Francisco Piñas Rubio and colleagues between 1997 and 2006 - which, however, contains little more than photographs of specimens (frequently in poor quality and without proper identification) plus their collection data. The slender volume discussed here is the first part of a planned 20 volume series that intends to cover the fauna of a large, though for the most part nontropical, Latin American country, viz. Argentina. From the subtitle it becomes clear that these books will not (and cannot) be full 'scientific monographs'. Rather they shall provide illustrated and commented catalogues that render the fauna accessible to further and more detailed study. It is this perspective that I have taken to review the first issue that has now been published.

This initial volume deals with the Castiniidae, a small family of little more than 200 species worldwide. Nine-teen of these have been recorded in Argentina, and two more species are illustrated as they may occur (or might have historically occurred) in the country. Thus, the book figures about 15% of Neotropical Castniidae diversity – not a bad start for a moth family that most lepidopterists will be rather unfamiliar with. To start such a book series with a small and comparatively 'easy' family (in terms of taxonomy) was certainly a good idea. Overall this little volume is quite convincing. Following a short general prelude and an illustrated introduction into the family, the main part of the book is comprised of the species accounts. Each species is illustrated

Received: 3 September 2012

Copyright: This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivs 3.0 Unported License. To view a copy of this license, visit http://creativecommons.org/ licenses/by-nc-nd/3.0/ or send a letter to Creative Commons, 171 Second Street, Suite 300, San Francisco, California, 94105, USA. in color, usually both sexes and often also in dorsal and ventral view. The species accounts are short; they consist of a list of synonymous names under which each species has been treated thus far, a brief description of their geographic distribution (overall and within Argentina), a small distribution map, a paragraph on their known larval host-plants, and supplementary information. A references list and an index conclude the volume.

I found the photographs of good (though not excellent) quality. What appeared to be most useful for a reader (like myself) rooted in evolutionary biology, ecology and biodiversity research, were the distribution maps and the host-plant records. I was surprised to learn that only four castniid species have more substantial geographic distributions within Argentina, whereas the remainder is confined to the tropical northeastern tip (province of Misiones) and thus are certainly endangered by the massive urban development and environmental change going on around Buenos Aires. I was also impressed that for quite a number of species at least some basic data on larval host-plant affiliations are available - which were carefully extracted from various (often historical) sources. An odd old record of an Apiaceae host-plant for Geyeria uruguayana seems highly improbable, though, and might better have been qualified as such.

There are a few critical issues to remark on. First, I doubt whether it is necessary (and useful) to illustrate so few moths per page. For a family of modest diversity this may be acceptable, but for more speciose taxa it would certainly be helpful to have the plates more densely used with figures (enabling direct comparisons across various species). Scalebars should also be included with the figures, and information on characters that are important for identification (either in the text or by indication on the plates) will be valuable with more species-rich and taxonomically more complicated taxa. Second, including at least a brief summary for each species in English would render the book series far more accessible to the non-Spanish speaking world (the species accounts themselves are not problematic in that regard). Third, the references need to be more carefully cross-checked between the text body and the references list. I stumbled over a sizeable number of citations in the text which are unfortunately not included in the references list. To give just one example for a species that is nowadays of peculiar concern in Europe as an introduced pest of palm trees, *Paysandisia archon*: of 12 literature sources cited in its species account, six are not found in the references list. Moreover, quite a number of papers from the last decade on this species of economic interest were unfortunately not covered as well. The recent synopsis of Castniidae from Paraguay (Ríos & González, 2011) probably appeared too late in print to be included in the reviewed book. Overall, however, this book is a promising start to a series on the Lepidoptera of Argentina. I wish this series a healthy development and very much look forward to seeing additional volumes to appear in print.

LITERATURE CITED

Ríos S.D., & J. M. GONZÁLEZ. 2011. A synopsis of the Castniidae (Lepidoptera) of Paraguay. Zootaxa 3055: 43–61.

KONRAD FIEDLER, Department of Tropical Ecology & Animal Biodiversity, University of Vienna, Austria konrad.fiedler@univie.ac.at